

AMENDMENTS TO THE SPECIFICATION

Please replace paragraphs, [0009], [0014], [0015], [0016], [0019], [0021] and [0023] with the following amended paragraphs:

[0009] FIG. 4 is a cross sectional view of the shift control device, taken along line IV-IV in Fig. 2, in an inoperative state;

[0014] FIGS. 1-7 are various views of a particular embodiment of a shift control device 105 according to the present invention. As shown in those Figures, shift control device 105 is constructed for pulling and releasing a shift control cable 104, and it includes a mounting bracket 103 with an annular mounting sleeve 103A defining a handlebar mounting axis (HB), wherein mounting sleeve 103A fits around a handlebar 101 to fasten bracket 103 to handlebar 101 in a known manner. An arm-shaped linearly sliding first operating body 220 (FIGS. 4-7) of shift control device 105 is slidably mounted to an intermediate bracket 227 attached to mounting bracket 103 through a screw 228. Sliding operating body 220 is located below handlebar 101 and terminates at an end 201 forming an abutment. An interface member in the form of an operating tab 202 with an operating force receiving surface 203, an operating force applying surface 204 and parallel spaced mounting ears 206 and 208 is pivotably coupled to corresponding parallel spaced mounting ears 210 and 212 on intermediate bracket 227 through a pivot shaft 216 and a C-clip 217, wherein pivot shaft 216 extends through openings 221, 222, 224 and 226 in mounting ears 206, 208, 210 and 212, respectively so that operating tab 202 pivots around a pivot axis (P). A decorative cap 232 (FIGS. 1 and 2) having the same general structure as operating tab 202 also may be pivotably mounted to mounting ears 210 and 212 on intermediate bracket 227 or may be otherwise placed over operating tab 202 in order to vary the shape or inclination of the surface that is operated by the thumb.

[0015] A pivoting second operating body 130 of the shift control device 105 also extends below the handlebar 101. A finger contacting part 132 of operating body 130, in the form of a button, is disposed beneath and to the right of operating tab 202. As a result, operation of both operating bodies is possible with the thumb of the hand gripping the handlebar 101.

[0016] As is shown in FIG. 3, shift control device 105 includes a pawl support plate 106 with a supporting shaft 108 and a pivot pin 152, all of which are rigidly fastened to bracket 103 by means of an attachment bolt 107, a washer 107a and a nut 109. A control body in the form of a take-up body 170 is mounted around supporting shaft 108 for rotation around a rotational axis (X). A first ratchet mechanism 150, used as a first transmission means, transmits the displacement of sliding operating body 220 to the take-up body 170 to cause the rotation of the take-up body 170 in one direction, and a second ratchet mechanism 160, used as a second transmission means, transmits the displacement of pivoting operating body 130 to the take-up body 170 to cause the rotation of the take-up body 170 in the other direction. In this embodiment, displacement of pivoting operating body 130 causes the take-up body 170 to pull on cable 104, and displacement of sliding operating body 220 causes the take-up body 170 to release cable 104.

[0019] Release plate 274 includes a spring coupling abutment 298. One end of a return spring 300 is attached to spring coupling abutment 298, and the other end of return spring 300 is attached to mounting ear 256 in sliding operating body 220 through an opening 304. Return spring 300 biases sliding operating body 220 toward a first home position (HP1) shown in FIGS. 4 and 6.

[0021] The pivoting operating body 130 is equipped with a second arm part 131, the second finger contact part 132 which is formed on the tip of the second arm part 131 in order to allow finger operation, and a pawl supporting part 133. A spring 111 is connected between washer 107A and pawl supporting part 133 for biasing pivoting operating body 130, and hence finger contacting part 132, to ~~the~~ a second home position HP2 shown in FIG. 4 by solid lines in Fig. 1. The path of motion of pivoting operating body 130, from second home position HP2 to a second shift position shown by broken lines in Fig. 1, is substantially parallel to the ratchet teeth plane (T).

[0023] Because sliding operating body 220 operates pawl 151 by pressing pawl pressing roller 250 against pawl operating part ~~151-C~~ 151C when sliding operating body 220 moves from the first home position HP1 shown in Fig. 6 to a first shift position shown in Fig. 7, very little movement (e.g., 9 millimeters) is required to operate pawl 151. Operating force receiving surface 203 of operating tab 202 is inclined relative to a horizontal axis (H) which, in this embodiment, is parallel to ratchet teeth plane (T). Thus, operating tab 202 will pivot counterclockwise as shown in FIGS. 4 and 5 even if the

rider's thumb applies a vertically downward force. As a result of the small movement required to operate pawl 151 and the inclined nature of operating tab 202, operating tab 202 may operate sliding operating body 220 without requiring the rider to press perpendicular to the handlebar and without precision placement of the rider's thumb. Indeed, even a downward sliding motion of the thumb could operate sliding operating body 220 across the front face of shift control device 105.